

NUMBERING ISSUES NPRM COMMENTS SOUGHT/TENTATIVE CONCLUSIONS

Q #	NPRM PARA #	INQUIRY/TENTATIVE CONCLUSION
		GENERAL INQUIRIES – Section III (B)
1.	31	[W]e seek specific comment on the relative costs and benefits, both financial and societal, of implementing each measure. It would be particularly helpful for commenters to weigh the cost of extending the life of the current NANP through the various proposed numbering optimization strategies against the projected cost of expansion of the NANP, based on the assumption that continuing current number allocation and use practices will lead to the premature exhaust of the NANP.
2.	32	While the NANPA's projections are not universally supported by industry experts, there is general agreement that the expected life of the NANP is limited. We seek comments on the design and assumptions contained in the NANPA's NANP Exhaust Model, and any alternative projections of NANP exhaust that we should consider.
3.	33	Industry numbering experts and the NANPA are already exploring options for NANP expansion. Based on their work, we believe that ten years may be a conservative time frame for rolling out a new NANP. We seek comment on this estimate and request that commenters provide alternative projections. Commenters should provide a detailed analysis of any projections provided.
4.	34	We also seek comment on what costs will be incurred in expanding the NANP. We note that available estimates for the total cost of expanding the NANP vary greatly; preliminary estimates of the total costs (telecommunications industry and societal combined) discussed at the February 1999 NANC meeting established a range of \$50 to \$150 billion. ... We seek comment on whether these preliminary estimates are within a reasonable range or whether the actual costs can be expected to be materially higher or lower. Commenters providing estimates should separate their cost estimates into telecommunications industry costs and societal costs.
5.	35	Under the current system for allocation of numbering resources, however, it is difficult for the industry to police itself effectively, given that each carrier has an incentive to obtain as many numbers as possible, especially in places where area codes are rapidly reaching exhaust. In such light, we seek specific comment on which of the measures we discuss in the Notice should be adopted as FCC rules. Alternatively, should we direct the NANC to ensure that certain of these measures are incorporated into existing industry guidelines?
6.	35	Further, we seek comment on the suggested interplay between FCC rules and industry guidelines on numbering optimization. For example, should we set forth general federal requirements for numbering resource optimization, and leave the detailed implementation of these requirements to industry bodies?
		ADMINISTRATIVE MATTERS – Section IV
7.	37	We seek comment on the costs and benefits of implementing each of the measures discussed in Section IV [Administrative Measures; see paragraph for discussion of FCC's initial take on C/Bs].
8.	38	NANC ITEM -- We specifically request the NANC to make recommendations regarding which, if any, of the measures discussed in Section IV should be adopted as FCC rules. We request that the NANC provide these recommendations concurrently with the deadline for receipt of reply comments on this Notice.
		<i>Definitions of Categories of Number Usage – Section IV (B)</i>
9.	39	[W]e tentatively conclude that a uniform set of definitions for the status of numbers should be established for purposes of implementing the proposals set forth in this Notice.

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10.	40	As a general matter, we seek comment on whether these uniform number status definitions should be codified as part of the FCC's rules, as are certain definitions that relate to the status of toll free numbers. In the alternative, we seek comment on whether uniform number status definitions should be incorporated into the CO Code Guidelines and the Thousand Block Pooling Guidelines, as intended by the INC.
11.	40	We further seek comment on whether all of the proposed definitions are necessary and useful, as well as on whether we should adopt any additional number status definitions, such as definitions related to telephone numbers allocated to resellers by facilities-based carriers.
12.	41	An <i>administrative number</i> is one which is not or should not be assigned to a customer, because it is in one of the following categories: employee/official number; Location Routing Number (LRN); test number; Temporary Local Directory Number (TLDN); or Wireless E911 ESRD/ESRK. The referenced subcategories are as follows: - An <i>employee/official number</i> is a number assigned by a service provider for its own internal business purposes. We seek comment on the types of internal business purposes for which carriers use employee/official numbers. We further seek comment on whether this definition should be tightened, either by specifying appropriate uses for employee/official numbers, or by identifying uses that are not appropriate.
13.	41	- A <i>Location Routing Number (LRN)</i> is the ten-digit (NPA-NXX-XXXX) number assigned to a switch or point of interconnection (POI) used for routing in a permanent local number portability environment.
14.	41	- A <i>test number</i> is a number assigned for inter- and intra-network testing purposes. We seek comment on the types of purposes for which carriers use test numbers. We also seek comment on whether this definition should be tightened, either by specifying appropriate testing uses for numbers, or by identifying uses that are not appropriately termed "testing."
15.	41	- A <i>Temporary Local Directory Number (TLDN)</i> is a number dynamically assigned on a per-call basis by the serving wireless service provider to a roaming subscriber for the purpose of incoming call setup.
16.	41	- A <i>wireless E911 emergency services routing digits/key (ESRD/ESRK) number</i> is a ten-digit number used to route an E911 call to the appropriate Public Service Answering Point (PSAP) when that call is originating from wireless equipment. If a NANP telephone number is used as an ESRD or ESRK, this number cannot be assigned to a customer.
17.	42	An <i>aging number</i> is a number in the aging process. Aging is the process of making a disconnected telephone number unavailable for re-assignment to another subscriber for a specified period of time. An aging interval includes any announcement treatment period, as well as the blank telephone number intercept period. A number is disconnected when it is no longer used to route calls to equipment owned or leased by the disconnecting subscriber of record. We seek comment on the standard aging intervals currently used by carriers, as well as on whether we should set limits on the amount of time a number may remain in Aging status, e.g., 90 to 120 days.
18.	43	An <i>assigned number</i> is a number that is: (a) working in the PSTN under an agreement (e.g., tariff, contract) at the request of a specific customer for that customer's use, or (b) not yet working but has a customer service order pending. We seek comment also on whether this definition should be further refined by limiting the time during which a customer service order may be considered to be Pending, e.g., 3 to 5 days.

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19.	44	A <i>dealer numbering pool</i> is a set of numbers allocated by a service provider to a retail dealer for use in the sale and establishment of service on behalf of that service provider. We seek comment regarding how carriers currently classify these numbers for the purpose of determining available inventories. We seek comment on how dealer numbering pools should be treated, and what, if any, limitations should be imposed in connection with assigning numbers to dealer numbering pools.
20.	45	A <i>ported-out number</i> is an assigned number that is ported from the code holder/block holder to another service provider. With respect to ported-out numbers, we seek comment on how the porting carrier and the ported-to carrier should treat these numbers for reporting purposes. Should both of these carriers treat the number as unavailable for assignment? Should the ported-to carrier be entitled to treat the ported-out number as an assigned number for purposes of calculating its utilization level?
21.	46-47	<p><i>Reserved number:</i> The industry has been working to craft a definition of reserved telephone number. To date, the industry has crafted a proposed set of characteristics for a reserved number, which include: (1) A reserved number is a non-working number[;] (2) A reserved number has been set aside by a service provider at the request of a specific end-user customer for that customer's future use[;] (3) The reserved status of a telephone number is reflected in the telephone number administration system of the service provider in whose inventory the numbers are being reserved[;] (4) The name of the party requesting the reservation is in the service provider's administration system[;] (5) The end user is aware of the reservation of numbers[;] (6) A reserved number has some restrictions with respect to timeframe and quantity[;] (7) Numbers reserved by a service provider on behalf of a customer may be ported where number portability is available and where any portion of the associated working numbers have been or will be ported from that service provider.</p> <p>In addition, the industry has set forth the following broad guidelines with respect to reserved numbers: (1) Service providers must ensure number reservations are not used for the purposes of hoarding[;] (2) All classes of customers must be treated equally under the application of reserved number guidelines[;] (3) Reserved number guidelines must apply equally to all service providers making telephone number reservations on behalf of their end-user customers[;] (4) Reserved number guidelines must apply equally to service providers making use of telephone numbers for their end user customers from another service provider's inventory (e.g., resellers, Type 1 interconnection for Commercial Mobile Radio Service (CMRS) carriers)[;] (5) The reserved number intervals begin for all customers regardless of any previous reservations, on the effective date of this process; [;] (6) The original interval limitation established for given customers shall continue uninterrupted if or when the customer changes service providers.</p>
22.	48	We are quite concerned about how reserved numbers are categorized, and whether they should be categorized as "unavailable for assignment." We believe that an appropriately narrow definition must be adopted for both "reserved number" and "reserved code" to prevent potential abuse, e.g., a carrier's use of reserved status as a means to amass and retain excessive inventories of numbers for which it has no immediate need. In this light, we seek comment on the NANC's working set of characteristics set forth above, and whether an appropriately narrow definition and/or set of reserved number guidelines can be fashioned from them. In the alternative, we seek comment on MCI WorldCom's proposal that a "reserved number" be defined as a number set aside by a service provider under the provisions of a legally enforceable written agreement at the request of a specific customer for future use.
23.	49	Moreover, we seek comment on whether time limits should be imposed on the amount of time a code may be held in reserved status. For example, our toll free assignment rules specify that a number may be held in reserved status for only 45 days. We seek comment on whether 45 days is an appropriate period of time for a number to be held in reserved status.
24.	49	In the alternative, we seek comment on whether carriers should be required to pay a fee for numbers held in reserved status. We note that it is the practice of some carriers to require such a fee from parties for whom they are reserving numbers, in order to ensure that the request for reservations is bona fide. We seek comment on whether the same type of assurance, via fee, should be required from reserving carriers themselves.

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25.	50	A number in <i>soft dial tone</i> is a number temporarily assigned to line equipment and facilities which permits restricted dialing (e.g., operator, 911, service provider business office). We seek comment concerning the purposes for which carriers use soft dial tone, and whether these numbers are best categorized as a subset of administrative numbers.
26.	51	Telephone numbers <i>available for assignment</i> are numbers within existing codes (NXX) or blocks (NXX-X) that are available for assignment to subscriber access lines or their equivalents within a switching entity/point of interconnection (POI), and are not categorized as assigned, administrative, aging, or reserved.
27.	52	Telephone numbers <i>unavailable for assignment</i> are numbers that are characterized as administrative, aging, assigned, or reserved. We seek comment on whether this number status definition promotes our numbering optimization objectives, or whether it should be narrowed, possibly by excluding reserved numbers.
28.	53	In the CO Code Guidelines, <i>working telephone numbers</i> are defined as the quantity of telephone numbers within existing NXX codes that are assigned to working subscriber access lines or their equivalents, e.g., direct inward dialing trunks, paging numbers, special services, temporary local directory numbers (TLDNs), etc., within a switching entity or POI. This definition seems to overlap with the definition of an <i>assigned number</i> set forth above. Also, the definition of a <i>working telephone number</i> contradicts the definition of an <i>assigned number</i> because the <i>working telephone number</i> definition considers TLDNs to be working numbers, but the definition of an assigned number does not. For these reasons, we seek comment on whether the definition of <i>working telephone number</i> should include TLDN and whether the definition of <i>working telephone number</i> should be included in a comprehensive set of telephone number status definitions.
<i>Verification of Need for Numbers – Section IV (C)</i>		
29.	58	<i>Initial codes.</i> With respect to an applicant's ability to obtain an initial code, we seek comment on what type of showing [of need] would be appropriate.... [W]e are concerned that under the current guidelines, certain new entrants may obtain numbering resources well in advance of when they will actually be able to provide service, which results in a highly inefficient distribution of numbering resources. To prevent this type of situation, we seek comment on whether applicants should be required to make a particular showing regarding the equipment they intend to use to provide service, the state of readiness of their network or switches, or their progress with their business plan, prior to obtaining initial codes, or whether any other type of showing should be required.
30.	59	We seek comment on whether applicants should be required to submit evidence of their license/certificate with their applications for initial codes, or conversely, whether we should place an obligation on the NANPA to check the status of an applicant's license or certification with the relevant state commission prior to issuing the requested initial code. To the extent that commenting parties support the latter proposal, they should comment on whether placing this obligation on the NANPA will slow down the time in which the NANPA processes initial code applications, and if so, by how much.
31.	59	We seek comment generally on the most efficient, least burdensome way to ensure that applicants do not obtain NXX codes in areas where they are not licensed or certificated. For example, would a general certification by a carrier that it intends to implement service within a specific timeframe adequately assure that carriers only obtain initial codes in areas where they are licensed or certificated?
32.	60	<i>Growth codes.</i> With respect to carriers' ability to obtain growth codes, we tentatively conclude that applicants should be required to provide data that supports their need to obtain additional numbering resources, as a means of preventing the building and carrying of excessive inventories.
33.	60	We further tentatively conclude that the NANPA may not allocate additional numbering resources to an applicant, unless the applicant has made a satisfactory demonstration of need.

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34.	61	We seek comment on whether requiring applicants to submit the Months-to-Exhaust Worksheet along with an application for a growth code would be an adequate demonstration of need for additional numbering resources.
35.	61	We further seek comment on whether NANPA should be required to evaluate the Months-to-Exhaust projection prior to allocating the requested code.
36.	61	We are concerned, however, about using the Months-to-Exhaust Worksheet as a proxy for need, because the Months-to-Exhaust analysis is forward-looking, and cannot be verified until after the carrier has already obtained the requested NXX code. Further, the Months-to-Exhaust forecast is largely subjective and dependent on good faith projections by each carrier. We seek comment on whether there are modifications to the current Months-to-Exhaust forecast that might alleviate these concerns.
37.	62	As an alternative [to the issue in the proceeding row], we seek comment on whether applicants should be precluded from requesting growth codes from the NANPA until they have achieved a specified level of numbering utilization (or Afill rate \geq) in the area in question.
38.	63	We seek comment generally on whether a percentage utilization threshold should be adopted, and if so, on the appropriate level for that threshold.
39.	63	We further seek comment on whether we should set a uniform nationwide utilization threshold or, in the alternative, establish a range within which state commissions may set the utilization rate. We also seek comment on whether it is possible to set a uniform utilization level that applies to all types of service providers; or whether there may be a need to set different utilization levels for different types of services or service providers.
40.	63	In addition, we seek comment on whether utilization levels, if adopted, should gradually be increased over time, in order to provide carriers time to adjust to the new requirements, and to improve their utilization performance over time.
41.	63	We further seek comment on whether the utilization threshold standard should apply nationwide, or only in areas that are experiencing the most difficulties with number exhaust, e.g., the largest 100 metropolitan statistical areas (MSAs) and in area codes where a jeopardy condition has been declared.
42.	63	Alternatively [to the issue in the preceding row], we seek comment on whether the smaller MSAs should have a lower utilization rate than the largest 100 MSAs. We seek comment on the costs and benefits of establishing a utilization threshold for these areas.
43.	64	<i>Calculating utilization levels.</i> We also seek comment on how utilization thresholds should be calculated. We propose that a carrier's utilization rate in a given geographic area (NPA or rate center) should be calculated by dividing the quantity of "Atelephone numbers unavailable for assignment" (the numerator) by the total quantity of telephone numbers in all NXXs assigned to the carrier within the appropriate geographic area (the denominator), and multiplying the result by 100.
44.	64	We are concerned, however, that certain number status categories, including reserved numbers, numbers allocated to resellers, and numbers in dealer numbering pools, may be used by carriers to stockpile numbers.... Accordingly, we seek comment on whether these categories of numbers should be excluded from the "numerator," or whether there are other ways to prevent the types of abuses about which we are concerned.
45.	65	In most cases, newly acquired and activated NXX codes will have lower utilization rates than older, more "mature" NXXs. Accordingly, we seek comment on whether applicants should have the option of excluding from their utilization rate calculation all NXXs obtained in the period immediately preceding the carrier's request for additional numbering resources (i.e., all newly acquired NXXs).
46.	65	We seek comment on whether "newly acquired" NXXs should be defined as those assigned to the applicant by the NANPA during the 90 days prior to the new application, or whether 120 days is a more appropriate period for exclusion. We propose that carriers wishing to take advantage of such an exclusion must exclude the newly acquired NXXs from both the numerator and the denominator of their utilization rate calculation. Thus, to the extent that a carrier had begun to assign numbers from a newly acquired NXX, the numbers assigned may not be included in the numerator, if the entire NXX were not included in the denominator of the equation. We seek comment on this proposal.

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47.	65	Wireless carriers have expressed concern that, because of the existence of seasonal fluctuations in demand for their services, the establishment of a utilization threshold will penalize them for not being able to utilize their NXXs immediately. Therefore, we seek comment on whether the exclusion of newly acquired NXXs from the utilization rate calculation will accommodate these carriers' unique situation.
48.	66	We further seek comment on whether utilization levels should be calculated on an NPA-wide or a rate center-wide basis. That is, should all of the NXX code resources that an applicant has been assigned in a particular NPA be included in the calculation of its utilization rate for the purposes of obtaining another NXX code in that NPA, or should the calculation be limited to only the NXX codes that have been assigned in the rate center in which the applicant wants an additional code? In particular, we seek comment on: a) which method more closely tracks how carriers actually use numbering resources; b) which method is least likely to result in strategic number acquisition behavior (or "gaming") by carriers; c) which method is least likely to result in carriers being unable to obtain numbering resources necessary to meet customer demand (for example, to expand service "footprint"); d) which method is least likely to have an anticompetitive effect on certain segments of industry; and e) which method would be less burdensome from a regulatory standpoint.
49.	67	In the event that we decide that utilization should be calculated on an NPA-wide basis, we seek comment on how regional variances in number utilization patterns should be taken into account.
50.	67	Additionally, we seek comment on whether and how "mixed" NPAs should be identified, as well as on whether different utilization levels should be set for mixed NPAs. In the alternative, should applicants be entitled to obtain additional growth codes in a particular rate center within a "mixed" NPA by demonstrating an extraordinary level of utilization within that rate center, e.g., 85%?
51.	68	<i>Impact on small carriers and new entrants.</i> We further seek comment on whether, in implementing a numbering utilization threshold, we should distinguish between carriers that have a small presence in a given NPA, or other appropriate geographic area, because they are either new market entrants or small carriers, and those that have a larger presence.... We seek comment on whether, from a competitive standpoint, different utilization thresholds should apply to carriers with a small market presence, and if so, what should be considered to be a small market presence. For example, should we apply a graduated utilization threshold scheme to carriers, based on the number of NXX codes they have in a given NPA (e.g., 50% or lower utilization rate for carriers with up to five NXXs in the NPA, 60% for carriers with up to ten NXXs, etc.)?
		<i>Reporting/Record-Keeping Requirements – Section IV (D)</i>
52.	69	[W]e believe that it is necessary to strengthen the current system for forecast and utilization data collection, both to enhance the accuracy with which the NANPA may predict patterns of number usage and of NPA and NANP exhaust, and also to serve as a check on the ability of unscrupulous carriers to hoard numbers or otherwise abuse the number allocation and administration system.
53.	72	We find that these shortcomings [discussed throughout paragraph 72] render the current COCUS increasingly unreliable as a tool for managing current and future numbering resources.
54.	73	<i>Mandatory data submission requirement....</i> [W]e tentatively conclude that we should mandate that all users of numbering resources supply forecast and utilization data to the NANPA.
55.	73	We further tentatively conclude that, as part of our obligation to develop a cogent national numbering resource policy that will ensure adequate numbering resources to all carriers, we must establish a more extensive, detailed and uniform reporting mechanism that will improve numbering utilization and forecasting on a nationwide basis.
56.	73	In addition, we tentatively conclude that the NANPA should serve as the single point of collection for telephone number usage and forecast data.

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57.	73	The data from this reporting system [see preceding row] would, however, be available to states that want to perform their own analyses to address NPA issues such as jeopardy situations and area code relief.
58.	74	<i>Specific data elements.</i> We seek comment on the specific data items carriers should be required to track. We seek comment on whether all NXX codeholders should be required to report the status of all telephone numbers within the NXX blocks assigned to them, according to the number status definitions set forth earlier in this section. In the alternative, we seek comment on whether utilization data reporting on a more aggregated basis (e.g., reporting on "telephone numbers unavailable for assignment" or some more aggregated set of telephone number status categories) would provide sufficient data to track accurately number utilization.
59.	75	We propose that any utilization reporting obligation that we adopt would be in addition to the demand forecasting requirement that the COCUS currently places on carriers.
60.	75	We seek comment on whether any modifications should be made to improve the quality and accuracy of carriers' demand forecasts, although we believe that consistent utilization tracking, and the attendant ability to audit forecasts after the fact, may significantly improve the quality of these forecasts.
61.	76	<i>Specificity of data.</i> We also seek comment on the level of granularity this utilization and forecast data should be reported, e.g., at the NPA level, rate center level, or thousands-block level. We tentatively conclude that, in order to provide information that is meaningful for utilization tracking and forecasting purposes, telephone number status data should be reported at the rate center level, at a minimum.
62.	76	Additionally, we seek comment on whether we should also require the reporting of utilization data at the thousands-block level where thousands-block pooling has been, or is going to be, implemented. If we do require data to be reported at the thousands-block level, we seek comment as to whether we should exempt carriers that currently are not subject to LNP implementation obligations from having to report at this level of granularity, or whether there are benefits to be had from obtaining thousands-block level data from LNP-capable and non-LNP-capable carriers alike in an area that may move to thousands-block pooling.
63.	76	In addition, we seek comment on whether we should limit utilization data collection to NPAs within the largest 100 MSAs and jeopardy NPAs, and whether we should consider less granular data-reporting requirements for areas outside the largest 100 MSAs or jeopardy NPAs.
64.	76	To the extent that commenters argue that more granular reporting requirements would impose greater costs and burdens on carriers, we ask that they provide specific cost estimates for comparison purposes, and explain in detail the burdens that would be imposed.
65.	77	<i>Frequency of reporting.</i> We tentatively conclude that carriers should report utilization and forecast data on a quarterly basis, rather than the current annual reporting cycle, because the pace of number exhaust is so great in many areas that annually collected information becomes so badly outdated that analyses based on it are useless.
66.	77	We seek comment on whether we should differentiate between carriers in high-growth rate NPAs and low-growth rate NPAs in terms of reporting frequency, and, if so, on how to distinguish high-growth NPAs from low-growth NPAs. In the alternative, would a mechanism modeled after the current practice of conducting a "Jeopardy COCUS," or additional round of forecast data collection when jeopardy is first declared in an area code, be sufficient to provide additional utilization and forecast data in high-growth NPAs?
67.	77	We further seek comment on whether there are other appropriate distinctions that should be drawn among carriers with respect to reporting frequency.
68.	78	<i>Confidentiality of data.</i> We seek comment on what, if any, special provisions should be established to protect the confidentiality of data disclosed to the NANPA, the FCC, and/or the state commissions.

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69.	78	Under Exemption 4 of the Freedom of Information Act (FOIA), the FCC need not disclose "commercial or financial information . . . [that is] privileged or confidential." Based on the proposals set forth above in this section, we seek comment on what specific information that we may request from carriers would fall within this exemption.
70.	78	Regarding proposals to enhance the COCUS, the NANC has recommended that states have access to aggregate utilization data and solely for a stated purpose. Also, the NANC determined that states may obtain carrier-specific data only in states where a legally enforceable confidentiality agreement is in place. We seek comment on the NANC's recommendations concerning use of confidential data by the state commissions.
71.	79	<i>Cost of data collection activity.</i> To ensure that the data collection requirements are not overly burdensome, we seek comment on the cost of the proposed data collection activities to service providers. Specifically, we seek comment on the estimated fixed and incremental costs of that collection. We also seek comment on whether the fixed costs can be shared.
72.	79	In addition, we seek comment as to whether there are any economic, legal, or business reasons for excluding small carriers from reporting requirements, or otherwise scaling back their reporting obligations. Alternatively, we seek comment whether such an exclusion for small carriers would be necessary if the proposed additional utilization data were only collected from NPAs in the largest 100 MSAs and in jeopardy NPAs.
73.	80	<i>Alternative data collection options.</i> Finally, we seek comment on several alternative data collection options the industry has proposed. The forecast and utilization reporting process in the current Thousand Block Pooling Guidelines is one such option.... We seek comment on whether the data collection provisions in these pooling guidelines should be applied more generally, i.e., outside of pooling areas, and to all carriers, rather than just carriers participating in pooling.
74.	81	We seek comment on whether LINUS would meet our data collection requirements, or whether modifications to LINUS are required in order to make it more responsive to our forecasting and tracking needs.
75.	82	In addition, other industry parties have submitted proposals to NANC for a number utilization and forecasting mechanism to replace COCUS. [ATT & USW proposals discussed in paragraph text] ... Although these proposals are presently under review by NANC, we seek comment regarding whether we should adopt any of their specific components.
		<i>Audits- Section IV (E)</i>
76.	83	Because we believe that audits can serve as a valuable tool in our efforts to promote numbering resource optimization, we propose that the need verification measures proposed and the data collection program proposed earlier in this section be supplemented with a comprehensive audit program that verifies carrier compliance with federal rules and industry numbering guidelines. We seek comment on this proposal.
77.	84	Three types of audits are commonly used: "for cause" audits, regularly scheduled audits, and random audits. As further detailed below, we seek comment on whether and, if so, how, all three types of audits should be employed as part of a comprehensive audit program to monitor carrier compliance with number allocation and administration rules and guidelines. We further seek comment on the comparative costs and benefits associated with performing each type of audit.
78.	85	"For cause" audits are conducted if there is reason to believe that the information a carrier has provided, e.g., in connection with either reporting requirements or an application for additional resources, is inaccurate or misleading.... For this reason, we tentatively conclude that we should include for cause audits within the comprehensive audit program proposed.
79.	85	We further seek comment on whether we should consider subsequent follow-up audits on carriers that in previous years had been subject to for cause audits for supplying inaccurate or misleading data or forecasts.

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80.	86	Regularly scheduled audits are repeated on a fixed schedule for a representative cross-section of carriers, and, in this context, would be applied to all entities that obtain numbering resources. Given the large number of carriers that hold numbering resources, we tentatively conclude that regularly scheduled annual audits of all numbering resource holders would be too costly to be justified. Instead, we seek comment on whether conducting regularly scheduled audits every three years represents a reasonable compromise between effective auditing and cost containment.
81.	87	Random audits provide a third means by which carrier utilization and forecast information can be reviewed for accuracy. Through such audits, the auditor reviews a specific carrier's information without triggering the expense and burden of regularly scheduled audit of all carriers. We seek comment on whether we should adopt a random audit approach for use in situations where accurate reporting is paramount, such as in area codes where jeopardy has been declared, or whether there are other situations in which random audits would be appropriate.
82.	88	<i>Audit responsibility.</i> We believe that numbering resource audits should be conducted by a neutral entity.
83.	88	One possibility is that the NANPA could conduct these audits. It is also possible that the FCC, state public utility commissions, or other neutral third parties could conduct numbering resource audits. We seek comment on how audit responsibility should be apportioned among these possible candidates.
84.	88	We further seek comment on whether we should direct the NANC to select an entity to audit carrier number utilization and forecast data using a competitive bidding process that is subject to our approval.
85.	89	<i>Audited information/procedures.</i> We believe that the audit program should address all aspects of carrier compliance with our numbering resource rules and industry numbering guidelines, focusing in particular on utilization data reporting and forecasting.
86.	89	We seek comment on the process by which specific auditing procedures should be established, as well as on the development of statistical and analytical approaches that will be required to evaluate the quality and validity of reported data. We ask parties to comment, in particular, on how we may structure an audit process that is flexible enough to focus on new problems or issues as they arise.
87.	90	NANC ITEM: We note that the NANC and the INC have been working to develop a comprehensive audit process, and we direct the NANC to provide a progress report regarding this work effort to the Common Carrier Bureau on or before the deadline for initial comments in this proceeding.
88.	90	While we believe that we should develop a national framework and procedures for numbering resource audits, so that there is some degree of uniformity across the country in the way that audits are conducted, we also recognize that state commissions should have a major role in the development of this framework and procedures.
		<i>Enforcement - Section IV (F)</i>
89.	91	We seek comment on what actions we should take to enhance the enforceability of the number utilization and optimization provisions contained in the guidelines.
90.	92	We tentatively conclude that the NANPA, the FCC and the state commissions each have distinct roles to play in enforcing the provisions of the CO Code Guidelines, and other numbering utilization rules, and we seek comment on specifying more precisely what those roles are.
91.	92	We tentatively conclude that the NANPA should be empowered to withhold NXX codes as a sanction for violation of the CO Code Guidelines, especially where the violation involves failure or refusal to supply accurate and complete utilization or forecast data. We seek comment on this tentative conclusion and the circumstances in which the NANPA should be empowered to withhold numbering resources. For example, should NANPA be authorized to restrict future requests for numbering resources, as a sanction for prior violations, where the carrier has no pending request for resources when the violation is detected, or would this type of situation be better addressed using alternative sanctions?
92.	92	We also seek comment on whether any additional enforcement authority should be delegated to the NANPA.

NUMBERING ISSUES NPRM COMMENTS SOUGHT/TENTATIVE CONCLUSIONS

Q #	NPRM PARA #	INQUIRY/TENTATIVE CONCLUSION
93.	93	We seek comment regarding the appropriate allocation of number administration enforcement responsibilities between the FCC and state regulators.... We seek comment regarding whether delegating additional enforcement authority to state commissions would place the states in the position of performing numbering administration tasks, and if so, whether this should be any cause for concern.
94.	94	We tentatively conclude that fines and forfeitures, and possibly, in extreme situations, revocation of certification and licenses should be available as possible sanctions for violation of the CO Code Guidelines, all of which could only be imposed by regulatory authorities. We seek comment on this tentative conclusion. In particular, if state revocation of a wireline carrier's certification or the Commission's revocation of a wireless carrier's license is an appropriate sanction for CO Code Guidelines violations, what standard should be used to trigger this specific sanction option?
<i>Reclamation of NXX Blocks – Section IV (G)</i>		
95.	98	First, we seek comment on whether the definition of placing an NXX code "in service" should be clarified to mean not just activation of the code through the transmission of local routing information to the LERG, but also that the carrier has begun to activate and assign to end users numbers within the NXX code. We tentatively conclude that this clarification will better ensure that NXX codes are not left idle for a lengthy period.
96.	98	We note that adopting such a definition [referenced in the preceeding paragraph], by itself, could lead to undesirable behavior on the part of carriers, as they might simply activate a few numbers in an otherwise unused NXX block in order to avoid reclamation of the block. Therefore, we seek comment regarding whether such a change in the definition of "in service" should be adopted only in connection with a sequential numbering requirement, or whether we should adopt other safeguards to prevent this type of strategic behavior.
97.	99	We also seek comment on modifying the current reclamation provisions by requiring the NANPA to initiate NXX code reclamation within 60 days of expiration of the assignee's applicable activation deadline. We tentatively conclude that this modification will limit the length of time that an NXX code has been left idle and encourage better recycling of unused NXX codes.
98.	99	We further seek comment on whether there exist competitive pressures or other reasons that should discourage us from reducing the amount of time during which a carrier may reserve an NXX code from 18 months to three months, and, correspondingly, to reduce the period of potential extension of that reservation from six months to 30 days.
99.	99	We seek comment on whether we should consider any other modifications to the reclamation provisions to improve their enforceability, such as SBC's suggestion that we should maintain firm deadlines for activation by removing the discretion the NANPA presently has to determine the length of an extension.
100.	99	Finally, we seek comment on whether we should direct the INC to incorporate these proposed changes [in reclamation procedures] into the CO Code Guidelines, or whether we should adopt these proposals as FCC rules.
101.	100	<i>Delegating additional authority to the NANPA and the states.</i> We seek comment on what, if any additional authority we should delegate to the NANPA to enforce the NXX block reclamation provisions. We tentatively conclude that we should delegate additional authority to state public utility commissions to order NXX block reclamation in accordance with the CO Code Guidelines, and any changes thereto adopted during the course of this proceeding.
102.	101	We seek comment regarding whether we should direct the NANPA to refer questions or disputes about code activation, deadline extensions or reclamation directly to the state commissions for resolution, rather than to the INC. We also seek comment regarding whether we should require state commissions to establish any particular type of dispute resolution or appeals processes in connection with issues regarding activation and reclamation of NXX codes.
<i>Cost Elements and Cost Recovery – Section IV (H)</i>		

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Q #	NPRM PARA #	INQUIRY/TENTATIVE CONCLUSION
103.	102	We seek comment on the specific cost elements of the proposed administrative measures, including a detailed breakdown of the types of costs involved in implementation of each particular administrative solution (for example, increasing staff to monitor number usage, software to complete administrative tasks, etc.), as well as the overall magnitude of the costs of the various administrative solutions.
104.	102	We also seek comment on whether the benefits of moving to a more efficient use of our numbering resources achieved through implementation of the proposed administrative measures outweigh the costs of implementation of those administrative measures. We ask that commenters support their conclusion with specific cost data, where available, or other evidence relevant to a cost/benefit analysis.
105.	103	With respect to cost recovery, we tentatively conclude that the costs of the administrative solutions proposed above should be allocated and recovered through the existing NANPA fund formula.
106.	104	[B]ecause the administrative solutions we propose as possible ways of increasing the efficiency with which telecommunications carriers use numbering resources fall within the scope of numbering administration matters, we tentatively conclude that section 251(e)(2) requires that the costs of the administrative solutions be borne by all telecommunications carriers on a competitively neutral basis.
107.	104	[W]e tentatively conclude that section 251(e)(2) requires that the costs of the administrative solutions be borne by all telecommunications carriers on a competitively neutral basis. We tentatively conclude that including the costs of the administrative solutions in the NANPA fund will result in the allocation and recovery of those costs from all telecommunications carriers on a competitively neutral basis and should not overburden any one carrier or class of carriers. We seek comment on these tentative conclusions. Commenters should address the Commission's interpretation that "on a competitively neutral basis" means that the costs borne by each carrier do not affect significantly any carrier's ability to compete with other carriers for customers in the marketplace and whether the proposed cost recovery mechanism is consistent with this interpretation. Parties that oppose our tentative conclusions should propose specific alternative methods for allocating and recovering the costs of administrative solutions to the numbering crisis on a competitively neutral basis. In addition, parties that argue that the Commission has authority to exclude a class or classes of carriers from the costs of the proposed administrative solutions should provide a detailed discussion of their position, including applicable statutory and regulatory authority. Commenters also should identify which class or classes of carriers should be excluded and why.

NUMBERING ISSUES NPRM COMMENTS SOUGHT/TENTATIVE CONCLUSIONS

Q #	NPRM PARA #	INQUIRY/TENTATIVE CONCLUSION
		<i>OTHER NUMBERING OPTIMIZATION SOLUTIONS – Section V</i>
		<i>Rate Center Consolidation – Section V (B) (1)</i>
108.	106	We seek comment on ways in which we may create incentives for state commissions and local exchange carriers to pursue this measure more aggressively.
109.	116	We believe that rate center consolidation should be implemented to the greatest extent possible, and we seek comment on what actions this Commission should take to promote rate center consolidation.
110.	118	We seek comment on how we may further encourage states to implement rate center consolidation where beneficial impacts could be achieved. For example, would delegating additional authority to state commissions to require codeholders to return vacant, unused codes that are no longer needed because of consolidation, as is proposed above in Section IV, help them to realize the full benefits of rate center consolidation?
111.	118	We also seek comment on whether and how the FCC or state commissions can create incentives to encourage incumbent local exchange carriers (ILECs) voluntarily to combine rate centers for the purpose of improving the efficiency of number utilization and slowing NPA exhaust rates.
112.	118	In addition, we seek comment on whether the introduction of intraLATA dialing parity, and the heightened competition that it may bring to the short-haul toll market, may lessen incumbent carrier resistance to rate center consolidation. In addition, because the advent of competition in the short-haul toll market may reduce ILEC revenue for these calls, we seek comment on whether ILEC migration to larger calling areas must, as anticipated by state commissions, necessarily result in higher rates being charged for basic service.
113.	119	Although we believe that rate center consolidation will assist us in optimizing our numbering resources, we agree with MCI WorldCom that this measure will not, by itself, substantially reduce the demand for NPA relief until the industry addresses the underlying problem of associating call rating with NXX assignments.
114.	119	[W]e seek comment on whether there are ways to separate the call rating functions from the call routing functions, which would result in a reduced demand for NXX codes. We note that the Colorado Telephone Numbering Task Force recommends eliminating the link between call rating and NXX codes by investigating the possibility of using the Signaling System 7 (SS7) network, rather than the current reliance on associating NPA-NXXs with the specific vertical and horizontal (V&H) coordinates of a rate area to transmit the information required for the rating and routing of every call.... We believe that this proposal offers the possibility of greatly reducing the demand for additional NXX codes and thus merits further investigation. We seek comment on the Colorado Task Force's proposal. We also seek comment on whether the database modifications that carriers must make to accommodate LNP are similar to the modifications required to implement call rating using the SS7 network.
115.	120	[W]e seek comment on the relationship between rate center consolidation and other numbering optimization measures we may adopt, particularly number pooling. We seek comment on whether rate center consolidation should necessarily precede moving to pooling in an area, or whether it is possible to implement both measures simultaneously, and simply expand the pools as rate centers are consolidated.
116.	120	To the extent that commenters suggest that consolidating rate centers prior to number pooling would increase the effectiveness of pooling by creating fewer, larger pools within an NPA, we seek comment on how we might create incentives for state commissions to undertake rate center consolidation prior to implementing pooling in an area. For example, should we grant states the authority to implement pooling only after they have undertaken rate center consolidation in the area in question? In the alternative, would requiring carriers to meet specified number utilization thresholds provide them the incentive to consolidate rate centers voluntarily?

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Q #	NPRM PARA #	INQUIRY/TENTATIVE CONCLUSION
117.	121	Finally, we seek comment on how to ensure that rate center consolidation does not adversely impact 911 systems, in particular the default routing of 911 calls. We further seek comment on what, if any, role the FCC should have in determining potential impacts on 911 systems, and implementing appropriate solutions to these problems. More specifically, are the issues that arise regarding 911 default routing sufficiently similar in each state that we should consider referring the matters to the NANC for a recommendation on a solution or set of solutions that could be used in all states undertaking rate center consolidation? We also seek comment on whether the FCC should take any actions to ensure that the concerns of the 911 community are addressed in the rate center consolidation process.
		<i>Mandatory Ten-Digit Dialing and Related Measures - Section V (B) (2)</i>
118.	125	In light of these concerns [regarding inconvenience, education, reprogramming, network (incl. PSAP) upgrades], we seek further information on any other technical problems and costs associated with [10-digit dialing]. In particular, we seek comment on whether the ability to implement easily area code overlays could provide a disincentive to use existing resources more efficiently.
119.	126	We seek comment on whether we should adopt nationwide ten-digit dialing, or whether we should encourage states to implement ten-digit dialing as a priority.
120.	127	We seek comment on whether D digit expansion may be implemented on a statewide or NPA-wide basis, rather than at a mandatory national level by all service providers.
121.	129	[W]e seek further comment on the costs and benefits of expanding the D digit, and on whether we should mandate the adoption of this measure at the national level to ensure its effectiveness. We also seek comment on whether states should independently implement the expansion of the D digit as a numbering optimization measure at the present time.
		<i>LNP-Based Solutions: Number Pooling- Section V (C)</i>
122.	138	Given the potential benefits of a nationwide pooling architecture, we tentatively conclude that implementing thousands-block pooling in major markets is an important numbering resource optimization strategy that is essential to extending the life of the NANP.
123.	138	We believe that carriers should be required to participate in pooling in areas where the benefits of pooling outweigh the associated costs. We seek comment on how best to achieve this goal.
124.	141	For these reasons, we tentatively conclude not to pursue ITN pooling at this time.
125.	142	With regard to UNP, we seek comment on whether we should allow carriers to port unassigned numbers among themselves.... [W]e seek comment on whether allowing carriers to port unassigned numbers among themselves may result in call-routing problems and public safety concerns.
126.	142	We also seek comment on whether state commissions should make the determination to allow carriers to use UNP in a given area.
		<i>Pooling Roll-Out – Section V (C) (2)</i>
127.	144	Given the deployment schedule for LNP, we tentatively conclude that any deployment schedule for thousands-block pooling should initially be tied to the largest 100 MSAs.... We seek comment, then, on whether it is appropriate to tie initially the deployment schedule for thousands-block pooling to the largest 100 MSAs, or if another deployment schedule should be considered.
128.	145	We seek comment on whether ordering LNP capability primarily for the purpose of thousands-block pooling is permitted under the 1996 Act. Does this Commission have the authority, and can it delegate to other entities, the authority to order carriers to implement LNP for number utilization purposes?
129.	145	We seek comment on whether an entity other than a LEC could be permitted to request that a specific switch or group of switches be made LNP capable for the sake of providing thousands-block pooling within or without the largest 100 MSAs.

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Q #	NPRM PARA #	INQUIRY/TENTATIVE CONCLUSION
130.	145	[W]e also request comment on whether requests that a carrier become LNP capable could be made by an entity other than another LEC, such as a state commission, for areas outside the largest 100 MSAs.
131.	145	Because of the expense involved in converting switches to provide LNP capability, we also seek comment on whether the criteria for requesting LNP capability in a given switch or switches for the purpose of implementing number pooling should be more stringent than the criteria for requiring an already LNP-enabled switch or switches to participate in thousands-block pooling.
132.	146	As we have tentatively concluded that thousands-block pooling should be implemented where the benefits of doing so outweigh the costs, we seek comment, first, on what entity should be tasked with making the decision whether to implement pooling in a given area. For example, we could simply order that LNP-capable carriers engage in thousands-block number pooling in the largest 100 MSAs.... [or] we could delegate the decision to state utility commissions, which could order thousands-block pooling in any area, pursuant to a determination that the costs of ordering pooling are outweighed by the benefits.
133.	147	In the alternative, we seek comment on whether state utility commissions (or another entity) could make the decision to opt into a nationwide thousands-block pooling architecture on a regional basis, or opt out of a "default" nationwide roll-out of pooling. Based on the proximity of state utility commissions to area code exhaust problems, we seek comment on whether a regime such as that which currently exists in the area of area code relief is more desirable. That is, should we allow state utility commissions to elect to make the decision whether to opt in or out of thousands-block pooling, but provide that, if the commission elects not to make the decision, another entity decides whether an area should opt in or out of thousands-block pooling?
134.	147	We further seek comment on what entity should decide whether to deploy pooling in an area, if the state commission declines to do so.
135.	148	Ordering pooling in an area should be guided by the decision that the benefits of doing so will outweigh the costs.... [W]e propose that certain criteria be met to justify a mandate of pooling in an area, or, to relieve an area from a pooling mandate. We seek comment generally on what those criteria should be. [Cites/relies on NANC report list of "Conditions Which Support Maximum Potential"]
136.	149	We seek comment on what would be a reasonable number of LNP-ready service providers using numbering resources in a given area to justify requiring pooling in the area.
137.	150	[W]e seek comment on whether a criterion for opting in or out of a thousands-block pooling methodology should be the number of NXXs that remain in an NPA, or the expected number of thousands blocks to be returned within an NPA pursuant to a pooling plan.
138.	151	We seek comment on whether a criterion for opting in or out of thousands-block pooling should be an on-going or planned effort to consolidate rate centers within an NPA.
139.	152	We seek comment on whether the decision to opt in or out of a nationwide thousands-block pooling methodology should be based on detailed studies of the effectiveness that pooling would bring to a particular NPA or NPAs. If detailed studies incorporating some or all of the criteria outlined above are ordered, then we seek comment on whether we should designate the entity that will perform the studies. Furthermore, if we do so, we seek comment on who the entity should be.
140.	153	[W]e invite commenting parties to suggest any other criteria that may favor a mandate of thousands-block pooling in a given area.
141.	154	We seek comment on the relevant areas for opting into, or out of, a nationwide thousands-block pooling methodology.
142.	154	Due to the deployment of LNP, generally, in the largest 100 MSAs, we seek comment on whether the initial deployment of thousands-block pooling, like the LNP implementation schedule, should be limited to the largest 100 MSAs, with extension to other areas following the initial deployment.
143.	154	We also seek comment on whether the implementation should be staggered, like the LNP implementation schedule, to include the largest MSAs in the first group, with implementation in smaller MSAs later.

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Q #	NPRM PARA #	INQUIRY/TENTATIVE CONCLUSION
144.	154	We also seek comment on whether, if the paradigm is one of opting into, rather than out of, a nationwide thousands-block pooling methodology, pooling should be required in the entire MSA, on an NPA-wide basis, or on a rate-center-by-rate-center basis. Similarly, if the default implementation plan calls for pooling in the largest 100 MSAs with the possibility of opting out of the pooling plan, should the appropriate areas from which to opt out be based on an entire MSA, an NPA within the MSA, or on a rate-center by rate-center basis?
		<i>Implementation Time Frame - Section V (C) (3)</i>
145.	158	[T]he NANC Report estimates that all of them may be achieved, and thousands-block pooling could be implemented, within 10 to 19 months from a regulatory order. We seek comment on whether the estimated time allotted to each of the major tasks involved in implementing thousands-block number pooling is necessary, or, on the other hand, is sufficient, to ensure the proper implementation of thousands-block number pooling.
		<i>Non-LNP-Capable Carriers - Section V (C) (4)</i>
146.	161	[W]e recently decided in the <i>CMRS LNP Forbearance Order</i> that covered CMRS providers would be required to implement LNP in the largest 100 MSAs by November 24, 2002. [W]e believe that once covered CMRS carriers are LNP capable, they should be equally subject to any pooling requirement that we may adopt for LNP-capable wireline carriers. We seek comment on this proposal.
147.	165	We seek comment on the assertions of CMRS carriers and state regulators regarding the potential numbering resource optimization benefits that would flow from covered CMRS participation in thousands-block number pooling.
148.	165	We also seek comment on the projections presented by the NANPA concerning the comparative impact on NANP exhaust depending on whether pooling includes or does not include CMRS participants.
149.	165	NANC ITEM: We encourage the NANC to submit any conclusions or recommendations that it may have regarding pooling, including pooling by CMRS carriers, based on the NANPA's projections or the team's findings.
150.	165	We also urge all participants in this proceeding to consider and comment on the Number Utilization Study and NANP Exhaust Study and any responses to the report as they pertain to CMRS participation in pooling.
151.	166	If we were to extend thousands-block pooling requirements to covered CMRS providers, we seek comment on whether such requirements should be limited to specific NPAs or rate centers or whether they should apply to all NPAs located in the largest 100 MSAs.
152.	166	We also seek comment on the potential cost to covered CMRS providers if they are subject to pooling requirements. Assuming that they will have already incurred the cost of implementing LNP, what additional cost would be required to implement number pooling? Commenters should specifically address and, if possible, provide documentation of the incremental costs that would be incurred over and above the cost of LNP deployment.
153.	167	We also seek comment on the timeframe that would be required for implementation of number pooling by covered CMRS providers following LNP deployment.
154.	167	Assuming that this process could be completed before the November 2002 deadline for CMRS LNP deployment, covered CMRS carriers would presumably not require as lengthy a time interval to initiate pooling, because the administrative infrastructure for pooling would already be in place. We seek comment on this assumption, and on the ability of covered CMRS carriers to participate in decisions regarding number pooling administration prior to their development of LNP capability. Commenters should also address whether there are any other technical considerations and administration issues unique to covered CMRS carriers that could affect the timing of their participation in pooling.

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Q #	NPRM PARA #	INQUIRY/TENTATIVE CONCLUSION
155.	168	In light of our decision to extend the deadline for CMRS implementation of LNP until November 2002, we seek comment on whether there is a need to consider such an accelerated schedule to address specific number exhaust problems. Specifically, commenters should address whether there are potential benefits from CMRS participation in pooling earlier than November 2002 that would be sufficient to justify the significant added cost and burden that would be borne by covered CMRS providers in deploying LNP architecture on an accelerated basis. [for "covered" carriers]
156.	170	The second category of non-LNP-capable carriers consists of wireline and covered CMRS carriers outside the largest 100 MSAs, who will be required to deploy LNP at some time in the future only if and when they receive a request from a competing carrier.... At present, it is not certain to what degree carriers in this category will be subject to requests to provide LNP in their own markets, or when such deployment will occur.... In light of these uncertainties, we seek comment on the degree to which carriers in this category should be required to participate in any pooling regime we may establish for wireline or CMRS carriers in the largest 100 markets. Specifically, should a carrier that establishes LNP capability based on another carrier's request presumptively be required to participate in pooling? Alternatively, are there circumstances under which we should impose pooling obligations on carriers even if they have not received a request for LNP from another carrier? To what extent should pooling obligations apply if the carrier's deployment of LNP is limited to certain switches rather than its entire service area?
157.	171	[W]e seek comment on whether implementing the network changes required to support roaming would affect the cost to CMRS carriers of implementing pooling, even if such carriers do not receive a request from a competing carrier to deploy LNP in their home markets.
158.	173	We seek comment on whether the need for numbering resource optimization warrants the participation in pooling by wireless carriers that are not included in the definition of covered CMRS providers.... [W]e believe that such requirements should not be extended to non-LNP-capable carriers without a substantial showing that their participation in pooling would have significant numbering optimization benefits that outweigh those costs. We seek comment on whether participation by these carriers in pooling is necessary to achieve our numbering resource optimization objectives.
159.	174	As an alternative, we seek comment on the feasibility of numbering resource optimization methods that would enable non-LNP-capable carriers to participate in or approximate the effect of pooling without requiring them to develop LNP capability. For example, paging carriers currently receive allocations of numbers in thousands blocks through Direct Inward Dialing (DID) agreements. Under DID agreements, ILECs set aside blocks of numbers for paging carriers and route the numbers to them through PBX or Centrex trunks. In some states, wireless service providers receive allocations of numbers in thousands blocks through NXX code sharing arrangements, which are similar to DID agreements, except that they do not involve the use of PBX or Centrex trunks. [T]he Colorado Commission is considering a proposal that would enable rural LECs to receive numbers in thousands blocks by modifying their switches to query LNP-capable switches ("Colorado Rural LEC Proposal"). We seek comment on the Colorado Rural LEC Proposal, DID agreements, NXX code sharing arrangements, and any other methods that would accomplish the goal of enabling non-LNP-capable carriers to participate in or approximate the effect of pooling without requiring them to develop LNP capability.
160.	176	Finally, to the extent that non-LNP-capable carriers in a market are unable to use an "alternative" pooling method not based on LNP, it will be necessary to continue allocating numbers to these carriers in full NXX blocks while LNP-capable carriers in the same market may draw smaller blocks of numbers from the pool. This will require the establishment of a number allocation method that does not discriminate unfairly in favor of either pooling participants or non-pooling participants. We seek comment on how to establish such an allocation method and what its elements should be. In particular, we seek comment on how requests for numbering resources should be sequenced by the administrator to avoid unfair discrimination in favor of either pooling participants or non-pooling participants.

NUMBERING ISSUES NPRM COMMENTS SOUGHT/TENTATIVE CONCLUSIONS

Q #	NPRM PARA #	INQUIRY/TENTATIVE CONCLUSION
		<i>Pooling Implementation Issues – Section V (D)</i>
161.	178	We seek comment on whether we should adopt the T1S1.6 proposed technical requirements for thousands-block pooling as the standard for a national pooling architecture or, in the alternative, whether we should direct the NANC to recommend technical standards for thousands-block pooling once such standards have been adopted by the American National Standards Institute (ANSI).
162.	178	In addition, we seek comment on whether there are any technical issues with respect to thousands-block number pooling that have not been identified, such as potential impacts to private branch exchange equipment, or that remain to be resolved, and whether it is necessary for the Commission to direct or request resolution of these issues.
163.	181	We seek comment ... on whether the NENA-recommended standards, as well as the T1S1.6 recommended restriction on the porting of E911 routing numbers, are sufficient to ensure the reliable provision of E911 service where thousands-block pooling is implemented. If commenters do not believe they are sufficient, we ask them to describe in detail what additional measures the Commission should take to ensure that calls to E911 are completed accurately and without delay.
		<i>Administration - Section V (D) (2)</i>
164.	182	Any nationwide implementation of thousands-block pooling will require detailed guidelines governing its administration.... We anticipate that a similar type of arrangement will exist in relation to administration of thousands-block pooling. Indeed, the INC has already drafted guidelines relating to the functioning of the Pooling Administrator and entities requesting numbering resources from the Pooling Administrator. We seek comment on whether this arrangement should be the model for thousands-block pooling administration.
165.	183	The INC Guidelines propose a pooling architecture in which a Pooling Administrator functions essentially as another carrier, requesting numbering resources from the NANP in order to maintain a sufficient inventory of thousands blocks for allocation to carriers within a rate area. Carriers desiring blocks of numbers within a rate area request those blocks from the Pooling Administrator, rather than the NANPA. We seek comment on whether this general method of administration satisfies parties that may be taking numbers in thousands blocks from a pool as well as those that continue to take whole NXXs, and, in particular, if this model sufficiently addresses concerns about the neutral administration of the numbering resource.
166.	184	We seek comment on whether the NANPA should serve as thousands-block Pooling Administrator or whether the Commission should seek competitive bids in response to a request for proposal or requirements, as it did with respect to NANP administration. Parties recommending that the Commission seek competitive bids on pooling administration should discuss the advantages of using the competitive bidding process and the specific criteria to be used in selecting a Pooling Administrator.
167.	184	We tentatively conclude we should ask the NANC for a recommendation regarding what entity should serve as the Pooling Administrator. We seek comment on whether the criteria used by the NANC to evaluate potential Pooling Administrators adequately addresses concerns of the industry, state regulators, and the public. If not, we invite commenters to propose other criteria by which to judge potential Pooling Administrators.
168.	185	If the current NANPA is also chosen as the Pooling Administrator, all nationwide numbering administration functions will be concentrated in one entity. We seek comment on concerns raised by this possible hegemony over all nationwide number administration matters and whether we should seek a different entity to serve as the Pooling Administrator.

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Q #	NPRM PARA #	INQUIRY/TENTATIVE CONCLUSION
169.	186	[B]ecause duties imposed on the NANPA as it administers central office code assignments may be reduced as a result of carriers requesting numbering resources from the Pooling Administrator, some cost savings may be realized in that area. We seek comment on the efficiencies that may be gained by allowing the current NANPA and LNPA to serve as the Pooling Administrator, and whether these efficiencies outweigh the concerns associated with the concentration of these duties in one entity.
170.	188	We seek comment on whether setting a 10% threshold contamination level will harm a particular segment of the industry.
171.	189	To compensate for the perceived competitive advantage in favor of ILECs, MediaOne proposes that the contamination level for ILECs should be at least 25%, while 10% is appropriate for CLECs. MediaOne argues that this difference would help to ensure that ILECs and CLECs contribute to the industry pool in an equitable way. We seek comment on MediaOne's proposed alternative.
172.	189	In addition, we seek comment on network capacity and SCP implications of setting a contamination level at 25%.
173.	190	Because a thousands-block pooling infrastructure will likely require some time to implement, we seek comment on whether we should order some form of sequential number assignment prior to the actual implementation of pooling.
174.	191	Should sequential number assignment be limited to those areas in which pooling would be required within a certain amount of time?
175.	191	Should non-LNP capable carriers be required to assign numbers sequentially in anticipation of a pooling mandate at some future time?
176.	191	Should any decision to require sequential number assignment be left to state commissions, or are there consistency concerns that would be better addressed by adoption of a nationwide standard?
177.	191	What exceptions to a general requirement of sequential number assignment would have to be put in place to assure a service provider could meet the needs of a large customer or could respond to other types of customer requests or needs?
178.	191	Would sequential numbering cause undue burden to any particular industry segment, or create unnecessary customer inconvenience?
179.	192	Finally, the Thousands Block Pooling Guidelines propose a nine-month inventory of numbers in both the industry inventory and service provider inventory.... We seek comment on whether these inventory levels are appropriate to assure adequate access to numbering resources, while avoiding potential waste of the resource by permitting numbers to lie unused for overly long periods of time.
		<i>Cost Recovery - Section V (D) (3)</i>
180.	193	Because we conclude that thousands-block number pooling is a numbering administration function, we tentatively conclude that section 251(e)(2) authorizes the Commission to provide the distribution and recovery mechanism for both intrastate and interstate costs of number pooling.
181.	193	[W]e tentatively conclude that section 251(e)(2) addresses both interstate and intrastate matters and overrides section 2(b)'s reservation of authority to the states over intrastate matters.
182.	194	We tentatively conclude that an exclusively federal recovery mechanism for number pooling will enable the Commission to satisfy most directly its competitively neutral mandate, and will minimize the administrative and enforcement difficulties that might arise were jurisdiction over numbering administration divided.
183.	194	Under the exclusively federal numbering administration cost recovery mechanism, we tentatively conclude that incumbent LECs' numbering administration costs, including costs incurred as a result of number pooling, will not be subject to jurisdictional separations.

NUMBERING ISSUES NPRM COMMENTS SOUGHT/TENTATIVE CONCLUSIONS

Q #	NPRM PARA #	INQUIRY/TENTATIVE CONCLUSION
184.	195	Because we tentatively conclude that thousands-block pooling falls within the scope of numbering administration under section 251(e)(1), we also tentatively conclude that section 251(e)(2) requires that the costs of thousands-block pooling implementation be borne by all telecommunications carriers on a competitively neutral basis.... Parties that argue that the Commission has authority to exclude a class or classes of carriers from the costs of thousands-block pooling implementation should provide a detailed discussion of their position, including applicable statutory and regulatory authority. Commenters also should identify which class or classes of carriers should be excluded and why.
185.	196	[W]e tentatively conclude that, like number portability cost recovery, principles for both the distribution and the recovery of thousands-block pooling implementation must be competitively neutral.
186.	196	We tentatively conclude that an interpretation of section 251(e)(2) that permits the Commission to oversee both the distribution and the recovery of the costs of thousands-block pooling implementation best achieves the policy goal of ensuring the numbering administration costs overall, including thousands-block pooling costs, are not at odds with the pro-competitive goals of the Act.
187.	196	Moreover, we tentatively conclude that the two-part test adopted by the Commission to determine whether carriers will bear the interim and long-term costs of number portability on a competitively neutral basis should be applied here. Specifically, the mechanism for recovering the costs of thousands-block pooling: (a) should not give one provider an appreciable, incremental cost advantage over another, when competing for a specific subscriber; and (b) should not have a disparate effect on competing providers' abilities to earn a normal return.
188.	197	We tentatively conclude that thousands-block pooling administration involves three categories of costs: (1) costs incurred by industry as a whole (such as NANP administrator costs, and enhancements to the existing number portability regional database system); (2) carrier-specific costs directly related to thousands-block pooling implementation (such as enhancements to carriers' SCP, LSMS, SOA, and OSS systems); and (3) carrier-specific costs not directly related to thousands-block pooling implementation (such as unrelated upgrades to carriers' networks that happen as a result of thousands-block pooling implementation). We seek comment on these cost categories, and ask commenters to identify other categories of costs, if any, involved in thousands-block pooling implementation. To the extent other costs are identified, commenters should discuss who will incur such costs, for example, LECs, IXC, CMRS providers, or others.
189.	198	We seek further detailed estimates of the costs of thousands-block pooling, and ask that commenters separate any estimates by category of cost. In addition, we seek comment on the methodology used to develop these and other cost estimates, whether other parties have developed similar cost estimates, and whether the cost estimates account for avoided costs, such as savings from delay in the implementation of an expanded NANP. In particular, we also encourage comments from parties with knowledge of the costs incurred to implementing thousands-block pooling initiatives in the states of Illinois and New York.
190.	199	We tentatively conclude that 251(e)(2)'s competitively neutral requirement applies only to the allocation and recovery of thousands-block pooling implementation costs, that is, shared industry costs and carrier-specific costs directly related to the implementation of thousands-block pooling, and not to carrier-specific costs not directly related to thousands-block pooling implementation (network upgrades).
191.	199	Because we tentatively conclude that costs not directly related to providing number pooling are not subject to section 251(e)(2), we also tentatively conclude that the Commission is not required to create special provisions by which those costs may be recovered and carriers may recover those costs in any lawful manner consistent with their obligations under the Act. We seek comment on our tentative conclusions.
192.	200	We tentatively conclude that the shared industry costs of thousands-block pooling implementation should be recovered through the existing NANPA formula.

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Q #	NPRM PARA #	INQUIRY/TENTATIVE CONCLUSION
193.	201	The shared industry costs of thousands-block pooling implementation include, for example, modifications to the number portability regional databases to support thousands-block pooling. We tentatively conclude that a competitively neutral allocation of shared industry costs of thousands-block pooling implementation should allocate costs among all telecommunications carriers in proportion to each carrier's intrastate, interstate and international end-user telecommunications revenues.
194.	201	We conclude that the allocation among carriers based on end-user revenues will fulfill section 251(e)(2)'s requirement that "[t]he cost of establishing telecommunications numbering administration arrangements . . . shall be borne by all telecommunications carriers on a competitively neutral basis as determined by the Commission."
195.	201	We also tentatively conclude that once a telecommunications carrier has been allocated its portion of the shared costs of thousands-block pooling implementation, the carrier shall treat that portion of its costs as a carrier-specific cost directly related to thousands-block pooling implementation. We seek comment on these tentative conclusions, and ask whether other methods would allocate shared industry costs on a more competitively neutral basis. Commenters that oppose our tentative conclusions should propose specific alternatives.
196.	202	Further, we seek comment on whether the Commission has the authority to allocate the shared costs of thousands-block pooling implementation only to those carriers that receive thousands-blocks of numbers.
197.	202	We also ask commenters to address the impact of allocating shared industry costs only to carriers that receive numbering resources. Commenters should discuss whether such an allocation scheme meets the competitively neutral requirement of section 251(e)(2).
198.	203	We tentatively conclude that carrier-specific costs directly related to thousands-block pooling implementation could be allocated in at least two ways: (a) individual carriers bearing and recovering their own costs of thousands-block pooling implementation; and (b) carriers adding their carrier-specific costs directly related to thousands-block pooling implementation to the shared industry costs. We tentatively conclude that it is competitively neutral for carriers to bear and recover their own carrier-specific costs directly related to thousands-block pooling implementation. We seek comment on these tentative conclusions.
199.	204	Recognizing consumers' sensitivity to end-user charges, we tentatively conclude that incumbent LECs subject to rate-of-return or price-cap regulation may not recover their interstate carrier-specific costs directly related to thousands-block pooling implementation through a federal charge assessed on end-users.
200.	204	Instead, we tentatively conclude that incumbent LECs subject to rate-of-return or price-cap regulation should recover their carrier-specific costs directly related to thousands-block pooling implementation through the existing cost recovery mechanisms of rate-of-return or price-cap adjustments
201.	204	We also tentatively conclude that carriers not subject to rate regulation -- such as competitive LECs, CMRS providers, and non-dominant IXC's -- may recover their carrier-specific costs directly related to thousands-block pooling implementation in any lawful manner consistent with their obligations under the Act. We seek comment on these tentative conclusions, and ask whether they meet section 251(e)(2)'s requirement that numbering administration costs must be borne on a competitively neutral basis.
202.	205	We seek comment, therefore, on how price cap carriers should be permitted to recover shared industry costs of thousands-block pooling implementation, carrier-specific costs directly related to thousands-block pooling implementation, and carrier-specific costs not directly related to thousands-block pooling implementation. In particular, we seek comment on whether price cap carriers should be permitted to treat exogenously any of the above thousands-block pooling implementation cost categories
203.	205	We also seek comment on whether these costs, alternatively, should be placed in a new price cap basket or an existing basket. If parties recommend that such costs should be placed in an existing basket, we ask parties to identify which basket would be most appropriate.

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Q #	NPRM PARA #	INQUIRY/TENTATIVE CONCLUSION
204.	206	[W]e seek comment on whether pooling costs should be recovered through a per-number charge. Specifically, we seek comment on whether this approach may have advantages over a revenue-based cost recovery mechanism.
205.	206	[W]e seek comment on whether basing cost recovery on the quantity of numbers being held would discourage carriers from maintaining excessively large quantities of non-revenue generating numbers while rewarding carriers that efficiently use their numbering resources.
206.	207	We also seek comment on whether tying cost recovery for pooling to the quantity of numbers held by each carrier would provide economic incentives to participate in the pooling process by donating excess blocks back to the pool. We seek comment on whether holding spare numbers creates a cost for such carriers for which they have no offsetting revenue and whether each carrier would balance the benefit of holding a block of unused numbers against the costs associated with cost recovery. We seek comment on whether this method of cost recovery would provide an incentive to return spare blocks of numbers for which there is no foreseeable need, and ask whether this method meets section 251(e)(2)'s competitively neutral requirement.
207.	207	We also seek comment on other recovery methods for thousands-block pooling implementation costs.
208.	208	If we allow carriers to choose the method for achieving compliance with the mandatory threshold levels, we tentatively conclude that carriers would bear their own implementation costs, whether they meet the mandatory threshold levels through thousands-block pooling implementation or by some other means. We seek comment on this tentative conclusion, and ask whether it complies with section 251(e)(2)'s competitive neutrality requirement.
209.	209	We tentatively conclude that, whether or not the NANPA formula covers the costs of thousands-block pooling implementation, carrier-specific costs not directly related to thousands-block pooling implementation should be borne by individual carriers as network upgrades; as such, carrier-specific costs not directly related to thousands-block pooling implementation are not subject to the competitively neutral requirements of section 251(e)(2). We seek comment on this tentative conclusion, and ask if there are alternative methods for recovering this type of cost.
210.	210	We tentatively conclude that the states' role in deciding on a cost distribution or recovery mechanism for thousands-block pooling implementation will depend on who decides whether to implement pooling in a given area.... If ... we delegate to state utility commissions the decision-making authority as to whether to implement thousands-block pooling in any area, we tentatively conclude that we also will delegate to states the authority to implement a cost distribution and recovery mechanism, subject to our principles of the competitively neutral mandate of section 251(e)(2).
211.	210	Finally, if we allow state utility commissions to make the decision as to whether to opt in or out of a nationwide thousands-block pooling architecture on a regional basis, we tentatively conclude that we also will allow state utility commissions to choose whether to opt in or out of our cost distribution and recovery mechanism. If a state commission elects not to make the decision as to whether an area should opt in or out of a nationwide thousands-block pooling architecture, and we choose another entity to make the decision, we tentatively conclude that the state must follow our cost distribution and recovery mechanism. We seek comment on these tentative conclusions.
212.	212	Because of the potential for ITN pooling to offer a more efficient use of numbering resources than thousands-block pooling, we seek comment on the possibility of migrating from a thousands-block pooling regime to an ITN pooling regime.
213.	213	As a threshold matter, we seek comment on whether the benefits of moving to ITN pooling from thousands-block pooling outweigh whatever costs may be involved. We are also concerned that the implementation of thousands-block pooling not hinder a possible migration to ITN pooling. Therefore, we seek comment on what measures can be taken in implementing thousands-block pooling that could ease a transition to ITN pooling.
		<i>Transition Issues - Section V (D) (4)</i>
214.	213	We also seek comment on whether the costs of building thousands-block pooling systems that may allow for an easier transition to ITN pooling are not outweighed by the benefits of doing so, in terms of future cost savings in implementing ITN pooling.

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Q #	NPRM PARA #	INQUIRY/TENTATIVE CONCLUSION
215.	214	We also seek comment on whether UNP can be used simultaneously with thousands-block pooling, or whether special considerations must be met for the two measures to coexist.
216.	214	If it appears that the costs of allowing UNP and thousands-block pooling to coexist outweigh the benefits, we seek comment on whether we should allow carriers to port numbers by mutual agreement among themselves prior to a mandate of pooling, or in areas in which pooling may never be mandated.
		<i>Carrier Choice of Number Optimization Strategy – Section (V) (E)</i>
217.	216	[W]e seek comment on whether we should simply establish thresholds for efficient use of numbering resources, but leave the choice of method for achieving these thresholds to individual carriers.... We particularly encourage commenters to address whether and to what extent these alternatives would further the objectives of this proceeding.
218.	218	We seek comment on the degree to which carrier choice could reduce the potential effectiveness of certain optimization strategies, particularly thousands-block number pooling.
219.	219	Another potential concern on which we seek comment is how to establish an appropriate utilization rate that is competitively neutral to all participants in the telecommunications marketplace that require numbering resources. We seek comment on what an appropriate rate would be.
220.	220	e seek comment on whether a utilization rate should apply across the board, or whether different rates could be set depending on the class of carrier.
221.	220	If we mandate a uniform utilization rate that imposes a disparate impact on different types of carriers, we seek comment on whether this system would be competitively neutral. Alternatively, we seek comments on whether mandating different utilization rates for different classes of carriers would be competitively neutral.
222.	220	Finally, we invite comment on the feasibility of equalizing utilization rates among the various classes of carriers if those rates start out at different thresholds.
223.	221	We seek comment on the implementation of this approach, including how to determine an appropriate initial utilization rate and how quickly the rate should rise over time. Because gathering baseline data on current utilization rates is critical to the success of this proposal, we also seek comment on how quickly this proposal could be implemented, how quickly we could reasonably expect carriers with low utilization rates to meet successively higher thresholds, and how the timetable for such increases would affect their likely choices of numbering optimization methods.
224.	221	We also seek comment on the penalties for operating in an area without having achieved a threshold fill rate.
225.	222	We seek comment on whether utilization rates should be based on individual NXXs, rate centers, NPAs, states, or the entire region or regions served by a service provider.
226.	222	In addition, we seek comment on whether utilization rates should vary based on the likely overall demand for numbers.
227.	222	Thus, we seek comment on how to adapt the carrier choice alternative to variable local market conditions.
228.	223	We seek comment on what... would be a predicate for enacting a carrier choice regime.
229.	223	We also seek comment on the impact that adopting a carrier choice alternative would have on cost recovery for numbering resource optimization, as discussed in Sections IV.H and V.D.3.
230.	224	We seek comment on whether carrier choice should be governed by federal standards or whether we should delegate authority to the states to establish utilization rates and timetables that would apply to carriers under their jurisdiction.

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Q #	NPRM PARA #	INQUIRY/TENTATIVE CONCLUSION
231.	224	We also seek comment on the respective roles that this Commission and the states should play in sanctioning carriers that do not achieve the requisite utilization rates.
		<i>Pricing Options – Section VI</i>
232.	228	We seek comment, generally, on the legal issues involved in establishing a pricing mechanism for numbering resources. Section 251(e)(2) of the Act provides that the costs of numbering administration arrangements and number portability shall be borne by carriers on a competitively neutral basis as determined by the Commission. We seek comment on whether this delegation of statutory authority to the Commission is sufficiently broad to allow us to establish a pricing mechanism that would be based on the market value of numbering resources to carriers, or whether its scope is limited to recovery of administrative costs related to numbering administration. . We also seek comment on whether we have general authority to establish price-based mechanisms for number allocation based on our plenary jurisdiction over numbering issues in the United States under section 251(e)(1) of the Act. In the alternative, if necessary, should we seek such authority?
233.	229	Assuming that we have statutory authority to establish a pricing mechanism for numbering resources, we seek comment on whether there are any public policy reasons not to do so. For example, could we achieve increased efficiency in numbering usage through refinements and reform of existing administrative allocation mechanisms? In particular, we seek comment on arguments that have been raised against using prices to allocate numbering resources.
234.	229	One such argument is that numbers are a public resource that can not be owned, and that establishing a pricing mechanism would turn numbers into a private commodity.... We seek comment on whether a license-type arrangement would be consistent with our long-held view that numbers are a public resource.
235.	229	If we were to permit a charge for numbering resources, should such a charge be monthly, annual, or multi-year?
236.	229	We also seek comment on whether a two-tier pricing system would be preferable. Under a two-tier pricing system we envision a flat charge and variable charge for every NXX code. The purpose of the flat charge would be to discourage carriers from requesting more numbers than they need. Without such a charge, carriers may have the expectation that they could return excess numbers to the NANPA without incurring material costs. We seek comment on these observations.
237.	230	We recognize that requiring carriers to pay for numbers would impose costs on all carriers, but seek comment on whether these costs might pose a particular challenge for new entrants that require numbering resources simply to establish a presence in a market.... We seek comment on these issues, and on what measures would be needed to ensure competitive neutrality in using a pricing mechanism to allocate numbering resources.
238.	231	We also seek comment on the possible components of a pricing mechanism for allocating numbers. There appear to be two basic approaches for setting a "price" for numbering resources: administratively determined pricing and market-based pricing.
239.	232	Since the societal cost of numbering exhaust should exceed the direct industry costs of activating individual NPAs, pricing based on traditional cost recovery may result in too low a price to encourage efficient conservation of numbers. For this reason, we believe that a more expansive definition of cost must be used if we were to adopt an administratively determined pricing mechanism.

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Q #	NPRM PARA #	INQUIRY/TENTATIVE CONCLUSION
240.	232	We seek comment on the relative advantages and disadvantages of using an administratively determined pricing mechanism for numbering resources. More specifically, we seek comment on the types of costs that should be recovered. For example, commenters should address whether prices for numbers should be set to recover the cost of implementing a new NPA or the cost of expanding the NANP, as well as how these types of costs can best be estimated.
241.	232	We also seek comment on whether a traditional cost-based system can yield prices that are sufficient to encourage carriers to utilize numbers efficiently and what should be done if there is more demand for numbering resources than there is available supply at the administratively set price.
242.	233	We seek comment generally on how ... a market-based pricing mechanism could be structured and implemented.
243.	233	We also seek comment on whether a market-based pricing mechanism can be designed to reflect fully the total private and societal cost of numbering resources.
244.	234	We believe one way of recognizing and addressing the societal cost of eventual NANP exhaust would be to prescribe a life for NPAs and to release NXX codes at a rate that corresponds to this life. The price of NXX codes could be increased to reflect higher societal costs by lengthening the expected lives of NPAs or could be reduced to reflect lower societal costs by shortening prescribed lives. We request comment on whether controlling the release of NXX codes in each market provides a reasonable mechanism for reflecting all relevant societal costs associated with numbering resource use. Commenters are asked to identify other approaches that could be used to ensure that a market-based pricing system reflected the full societal cost of numbering resources.
245.	235	By permitting the price of numbering resources to float depending on the relative supply and demand for numbers in each market, carriers will have an incentive to use newly activated numbers, as well as previously assigned numbers efficiently. We seek comment on the types of procedures and safeguards that would have to be employed for a market mechanism to operate efficiently and in a non-discriminatory manner. For example, how could we prevent the price of NXX codes from fluctuating widely from month to month in the same market or rising to levels that might discourage competitive entry?
246.	235	We also seek comment on whether and how previously assigned numbers should be priced. Efficiency would require that all numbers, whether previously assigned or currently available for assignment, reflect their current market value. Otherwise, there will be little incentive for carriers to improve their utilization of existing stocks of numbers. Moreover, incumbent carriers would have a distinct competitive advantage over new entrants if they had large stocks of numbers for which they did not have to pay the current market price.
247.	235	We also seek comment on whether a secondary market for numbers should be permitted. We believe that this would facilitate improved use of existing stocks of numbers and would facilitate the most efficient use for all numbers.
248.	236	For an administratively determined pricing system, the geographic area will be determined by a definition of which costs will be reflected in the price for numbers. In a market-based pricing system, the area in which carriers compete for available numbering resources can be used to define a single market. Commenters are requested to address the above distinction and provide suggestions on how geographic areas under each mechanism should be defined. Our initial impression is that the area covered by each NPA represents a separate geographic area under both mechanisms.
249.	236	We note that NXX codes can be located anywhere within the NPA from which they are assigned but cannot be moved between NPAs. Thus, NXX codes in different NPAs logically could have different prices because they have different cost and demand characteristics. NXX codes in Wyoming, for example, can be expected to have a different price than NXX codes from a New York City or Long Island area code. Alternatively, the geographic area could be defined as broadly as the nation or as narrowly as a rate center. We seek comment on the appropriate geographic area for administratively determined or market-based pricing mechanisms and whether this market should be defined broadly or narrowly.

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Q #	NPRM PARA #	INQUIRY/TENTATIVE CONCLUSION
250.	237	If we were to adopt either an administratively determined or a market-based pricing mechanism, we seek comment on what should be done with revenues generated by this type of allocation system. One possibility would be to use the funds primarily to offset all costs associated with numbering such as administration, pooling, and rate center consolidation. With respect to rate center consolidation, revenues could be used to cover all transitional costs incurred by local exchange carriers, subscribers, Public Safety Answering Point service providers, and others. Another possibility is that we could substitute numbering revenues for other funds used to finance existing telecommunications programs. It is possible, however, that Congress will require all funds that are collected to be turned over to the U.S. Treasury.
251.	238	If we were to adopt such a mechanism, we seek comment on what a feasible time frame for implementing it would be, and whether this decision should affect our thinking about number optimization methods discussed elsewhere in this Notice that could be implemented in the interim. We believe that gradual implementation of a price-based allocation mechanism would be preferable to a flash-cut change because this would allow carriers time to make necessary changes in institutional arrangements and/or implement procedures that encourage efficient numbering resource use.
252.	239	Therefore, we seek comment on what types of transitional pricing mechanisms and transitional safeguards could be used during a gradual implementation of either an administratively set or market-based pricing mechanism. For an administratively set pricing mechanism, we could establish a low initial price designed to recover a specified portion of costs and over time gradually increase that price to recover all relevant costs. For a market-based pricing system, we could set an initial price cap at the average cost of activating a new NPA in the existing NANP. That cap could be gradually increased until it approximated the average cost of activating a new NPA in an expanded NANP.
253.	239	We also seek comment on how long such caps should be kept in place. One possibility is to permanently retain a cap based on the long run average cost of activating a new NPA in an expanded NANP. Alternatively, we could gradually move away from any cap. We seek comment on the use of a cap to limit prices during the transition, how we should set the cap, and whether the cap should be permanent.
254.	239	One of the problems with setting a cap is that if it is set too low, demand for numbers may exceed supply at the capped price and administrative allocation controls such as rationing will be also required. We seek comment on the procedures we might adopt to address or avoid those situations.
255.	240	We seek comment on the potential synergies between a price-based allocation system for numbers and certain of the other number optimization measures discussed in this Notice.... We request commenters to indicate which of the other numbering resource optimization measures discussed in this Notice would work in conjunction with a pricing mechanism. Commenters should also address whether the economic incentives provided by pricing numbering resources would be sufficient to encourage the industry to undertake these optimization measures on their own or whether at some level, regulatory authorities would still have to mandate the implementation and enforcement of such measures.
		<i>Area Code Relief – Section VII</i>

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Q #	NPRM PARA #	INQUIRY/TENTATIVE CONCLUSION
256.	247 - 249	(247) We seek comment on whether the Commission, to facilitate the maximum optimization of numbering resources, should amend its existing guidelines or develop additional guidelines for area code relief. Second, we seek comments on whether area code overlays may be preferable to geographic splits from a numbering resource optimization perspective and whether the Commission should consider modifying the conditions it has imposed on the use of all-services overlays. Third, we seek comment on whether we should reexamine our prohibition of service-specific or technology specific overlays and whether there may be numbering resource optimization benefits that warrant modifying or lifting this prohibition under some circumstances. (249) We seek comment on the advantages and disadvantages of geographic splits relative to other methods of area code relief from a numbering optimization perspective. We also seek comment on whether there is a need for additional rules or guidelines at the federal level with respect to the implementation of geographic splits by state authorities. For example, if a split has recently been implemented, should there be any limitations or conditions on implementing another split as opposed to an overlay in the same area within a certain time frame? Are there other circumstances in which limitations or conditions on splits might be warranted such as following rate center consolidations, rollout of service provider number portability, or implementation of number pooling in an NPA? Alternatively, should we direct that the implementation of splits be accompanied by other numbering optimization initiatives to ensure that numbering resources in both the new and the pre-existing area code are used efficiently? If so, which of the methods discussed in previous sections are most suitable?
257.	252	We seek comment on the advantages and disadvantages of all-services overlays relative to other methods of area code relief from a numbering resource optimization perspective. In particular, we seek comment on the cost of implementing all-services overlays relative to other methods of area code relief and how this cost varies depending on whether the overlay is implemented on a prospective basis and whether other overlays have previously been implemented for the relevant area.
258.	252	We also seek comment on whether there is a need to modify our existing guidelines with respect to the implementation of all-services overlays. For example, should we retain the requirements concerning ten-digit dialing or are there numbering resource optimization benefits that would justify allowing states to implement overlays without this condition?
259.	252	Also, as in the case of geographic splits, commenters should address whether the implementation of overlays should be accompanied by other numbering resource optimization initiatives to ensure that numbering resources in both the new and the pre-existing area code are used efficiently.
260.	252	We also seek comment on the relative impact of splits versus overlays on the deployment and potential benefits of LNP. For example, if the geographic area covered by an NPA is reduced because of a split, could this reduce opportunities for customers to port their numbers that would have existed otherwise?
261.	253	Another possible overlay option is the use of so-called "reverse" overlays, which involve the creation of a single area served by two or more existing NPAs when a previously established NPA boundary is eliminated.... We seek comment on this alternative.
262.	254	We also seek comment on how the size of an all-services overlay area would affect the advantages and disadvantages discussed above.
263.	255	We seek comment on the feasibility of expanded area overlays as a means of allocating new numbering resources to areas facing exhaust of existing NPAs. In particular, we seek comment on the practicality of this approach in light of its potential effect on rating and billing of calls between the overlay NPA and underlying NPAs.
264.	255	We also seek comment on whether there are any practical limits to the size of overlay NPAs. For example, should we consider the possibility of regional NPAs that cover NPAs in multiple states, or even national NPAs established for overlay purposes? If we were to consider this approach, should the Commission assume responsibility for implementation of such codes, or should it delegate authority to the states to enter into agreements with one another for purposes of establishing multi-state overlay area codes?

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Q #	NPRM PARA #	INQUIRY/TENTATIVE CONCLUSION
265.	257	[W]e believe it is appropriate at least to reexamine our policies with respect to service-specific and technology-specific overlays, and to consider whether we should modify or lift the restriction on these area code relief methods. Do technology-specific and service-specific overlays yield potential numbering resource optimization benefits that would not also result from implementation of an all-services overlay? To what extent would concerns about the discriminatory impact of service or technology-specific overlays be mitigated if such overlays were prospective only and did not involve the taking back of numbers from existing customers?
266.	257	Commenters should also address whether technology-specific and service-specific overlays could yield potential new benefits that were not previously contemplated. For example, in the event that the wireless industry were to move to "calling party pays" (CPP) as a pricing option, could use of wireless-specific area codes provide a means to notify wireline customers that they are making a chargeable call to a wireless number?
267.	258	We also seek comment on whether there are particular services or technologies that could be assigned numbers from a technology or service-specific overlay code without raising the competitive concerns that we cited with respect to Ameritech's wireless-overlay proposal.
268.	258	In their respective petitions, Connecticut and Massachusetts argue that service-specific or technology-specific overlays would not produce anti-competitive effects if there is no existing or likely competition between the industry segment using the service/technology that is targeted by the overlay and the industry segment using the service/technology that is unaffected by the overlay. We seek comment on this assertion, and on what non-competing services or technologies, if any, would meet this standard.
269.	259	We further seek comment on how a technology-specific or service-specific overlay could be implemented in a manner that would promote our number optimization objectives. Because wireless carriers often require, on average, fewer NXXs than wireline carriers to serve the same size geographic footprint, technology-specific or service-specific overlays that cover the same geographic scope as pre-existing NPAs might decrease, rather than increase, the efficiency with which numbering resources are used.... Therefore, we seek comment on whether technology-specific or service-specific overlays should only be implemented on an expanded or regional basis.
270.	260	We also seek comment on the relationship between technology-specific or service-specific overlays and other numbering resource optimization methods discussed above, such as number pooling. For example, if we were to adopt pooling requirements for LNP-capable carriers, should we consider allowing the creation of overlay area codes specifically for carriers that are not LNP-capable?... We seek comment on the relative costs and benefits of this alternative.
271.	261	[T]o the extent that we consider any modification of our prohibition on service-specific and technology-specific overlays, we seek comment on whether we should consider exceptions to the current prohibition on a case-by-case basis or whether we should adopt general rules and guidelines.
272.	261	We also seek comment on whether we should address requests for service-specific and technology-specific overlays at the federal level, or whether we should delegate authority to the states to establish service-specific and technology-specific overlays within federal rules or guidelines.